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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,480	10/21/2003	John Keeler SR.	424532-002	5040
27805	7590	09/06/2006	EXAMINER	
THOMPSON HINE L.L.P.			CHAWLA, JYOTI,	
P.O. BOX 8801				
DAYTON, OH 45401-8801			ART UNIT	PAPER NUMBER

1761

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,480

Applicant(s)

KEELER, JOHN

Examiner

Jyoti Chawla

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/20/04, 4/18/05, 6/16/05</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 and 15 claim that the "air to crabmeat ratio is essentially 20%". The term "essentially 20%" in claims 7 and 15 is a relative term which renders the claim indefinite. The term "essentially 20%" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 1761

Determining the scope and contents of the prior art.

Ascertaining the differences between the prior art and the claims at issue.

Resolving the level of ordinary skill in the pertinent art.

Considering objective evidence present in the application indicating obviousness or nonobviousness.

(A) Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doerter (US 5268189) in view of Sugisawa et al (US 4840805).

Doerter teaches a process of treating and packaging fresh or cooked shellfish meat, such as crab, shrimp or lobster (Column 1, line 11 and lines 52-65), by providing a packaging container like a pouch (Column 2, lines 38-39); placing a volume of crabmeat into said packaging vessel (Column 2, lines 35-36). Doerter teaches the addition of a mixture of carrageenan and water to the container containing the shellfish (crabmeat) to effectively remove air from the package (Column 3, lines 6-10), thus adjusting the volume of air within said packaging vessel. Doerter teaches sealing of the container after packing (Column 3, lines 11-16) and subsequently sterilizing or pasteurizing the sealed container (Column 3, lines 17-25) as recited by the applicant in claims 1 and 10.

Doerter removes the air from the package by addition of carrageenan and water. Since Doerter does not vacuum all the air out there is a small volume of air that is left in the package before it is sealed, which would create partial vacuum and the package would contain some air to prevent the growth of undetected anaerobic bacteria as recited by the applicant in claims 1 and 10.

Regarding claims 2 and 11, Doerter teaches a flexible packaging vessel, such as a pouch (Column 2, lines 38-39).

Art Unit: 1761

Regarding claims 3, 4, 12, and 13 Doerter teaches that the pouch used for packaging shellfish could be made of a high density polyethylene resin (Column 2, lines 42-43), however the reference is silent as to the material of the pouch being a multilayered film. Regarding the nature of the packaging material, Sugisawa et al, hereinafter Sugisawa, teaches bags (container), for packing cooked fish products, that are made from laminates of materials, such as nylon, polyethylene teraphthalate (PET), polypropylene or cast polypropylene (CPP), aluminum foil etc., (Column 2, lines 61-68 and Column 3, line 65). Therefore, Sugisawa, teaches a multilayered (laminated) bag for packaging cooked fish etc., comprising PET, nylon, CPP and aluminum as recited by the applicant in claims 3, 4, 12, and 13.

Flexible packages made of high-density polyethylene that can withstand heat treatments have been known in the art for packaging meats including shellfish and crabmeat (Doerter). Laminated multilayered flexible packages that comprise of PET, nylon, aluminum and cast polypropylene (CPP) etc., have also been known in the art for their application in high retort food packaging (Sugisawa). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Doerter and use a multilayered film package comprising of layers of thermoplastic resin like PET, with nylon, aluminum and CPP to pack the shellfish (crabmeat) package to ensure a strong, heat stable bag or pouch with better elasticity and tear resistance. One would be further motivated to use a food package made with multilayered film as taught by Sugisawa for cooked food such as crabmeat to ensure that the seafood would remain in

Art Unit: 1761

a better condition after heat stabilization or pasteurization process and transportation/storage than it does in traditional packages.

Regarding claims 5-9 and 14-17, Doerter teaches removing air from the package by adding a mixture of carrageenan and water before sealing the package, which would create a partial vacuum in the package of shellfish (crabmeat), however the reference is silent as to the specific volume of air present in the package. Sugisawa teaches packaging the cooked fish product under vacuum (Column 3, lines 7-8), where the volume of air in the package is preferably kept at less than 15% of the total package volume, to improve the effect of sterilization and to prevent fish meat from breaking (Column 3, lines 7-16). Thus, Sugisawa teaches partial vacuum in the package where if the total volume of the package is 100, the air volume would be 15. Therefore, the preferable fish volume taught by Sugisawa would be 85 and the resulting ratio of air to fish is about 18% by volume, which would fall in the range recited by the applicant in claims 6-9 and 14-17.

It has been known in the art of packaging meat or fish products to reduce the amount of air from the package before sealing it for longer and safe shelf life of the food (Doerter) and it has also been known that reducing the air volume in the package to about 15% or less (or air to meat ratio of about 18% or less by volume), enhances the effect of sterilization or preserves the cooked fish product better (Sugisawa, Column 3, lines 3-34). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Doerter and include about 18% of air (by volume) to the packaged shellfish (crabmeat) product, to enhance the effect of the heat treatment

Art Unit: 1761

(pasteurization or sterilization) and also to prevent deterioration of crabmeat due to breaking. One of ordinary skill in the art would have been motivated to package with air to food ratio of about 18% to have a packaged fish or shellfish product with less bacteriological and physical damage during processing and storage, which is also the intent of the applicant.

(B) Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueyama et al. (US 2002/0061412) in view of Sugisawa et al (US 4840805).

Regarding claims 1-3 and 10-12, Ueyama et al, hereinafter Ueyama, teaches a heat shrinkable multilayer film (claims 3,12) and packages made using the film for packaging for meats such as crabs, fish and other marine products (Page 5, paragraph 0066) and the product packaged using the multilayer film (Page 7, paragraph 0099 and other examples). Ueyama teaches packaging the desired product in a vessel, such as a bag or pouch (Page 1, paragraph 0002) (claims 2,11) and placing a volume of the desired product in the packaging vessel and forming a casing; sealing the bag or package (page 7, paragraphs 0094 and 0099); and heat treating (pasteurizing) or sterilizing said sealed packaging vessel (Page 3, paragraph 0039).

Ueyama does not specify adjusting a volume of air within the package to obtain an air to crabmeat ratio to prevent undetected anaerobic bacterial growth, however Sugisawa teaches packaging the cooked fish product under vacuum (Column 3, lines 7-8), where the volume of air in the package is preferably kept at less than 15% of the total package volume, to improve the effect of sterilization and to prevent fish meat from breaking

Art Unit: 1761

(Column 3, lines 7-16). Since adjusting the volume of air inside a package improves the storage properties of packaged shellfish as taught by Sugisawa, one of ordinary skill in the art would have been motivated to package the shellfish (crabmeat) in a package made of multilayered film as taught by Ueyama and adjust the volume of air inside the package to have air to meat ratio of about 18% so that the sterilized package becomes more shelf stable, i.e., bacterial growth is reduced and since the package has air, anaerobic bacterial growth is negligible.

Regarding claims 4 and 13, the multilayered packaging film taught by Ueyama comprises at least one layer of polyethylene terephthalate or PET (Page2, paragraph 0024 and page 3, paragraph 0027); at least one layer of nylon (Page 3, paragraphs 0029, 0032 and 0034), however, the reference is silent as to the use of aluminum and cast polypropylene. Regarding the nature of the packaging material Sugisawa, teaches bags (container), for packing cooked fish products, that are made from laminates of materials, such as nylon, polyethylene teraphthalate (PET), polypropylene or cast polypropylene (CPP), aluminum foil etc., (Column 2, lines 61-68 and Column 3, line 65). Therefore, Sugisawa, teaches a multilayered (laminated) bag for packaging cooked fish etc., comprising PET, nylon, CPP and aluminum as recited by the applicant in claims 4 and 13.

Flexible packages made of multilayered films comprising of PET and nylon that can withstand heat treatments have been known in the art for packaging meats including shellfish and crabmeat (Ueyama). Laminated multilayered flexible packages that comprise of PET, nylon, along with aluminum and cast polypropylene (CPP) etc., have

Art Unit: 1761

also been known in the art for their application in high retort food packaging (Sugisawa). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ueyama and use a multilayered film package that also comprises of layers of aluminum and CPP along with the thermoplastic resin like PET and flexible nylon to pack the shellfish (crabmeat) package to ensure a stronger and more heat stable bag or pouch with better elasticity and tear resistance. One would be further motivated to use a food package made with multilayered films as taught by Ueyama and Sugisawa for cooked food such as crabmeat to ensure that the seafood would remain in a better condition after heat stabilization or pasteurization process and also during transportation/ storage.

Regarding claims 5-9 and 14-17, Ueyama is silent about the specific volume of air present in the package and also about the removal of air from the package. Sugisawa teaches packaging the cooked fish product under vacuum (Column 3, lines 7-8), where the volume of air in the package is preferably kept at less than 15% of the total package volume, to improve the effect of sterilization and to prevent fish meat from breaking (Column 3, lines 7-16). Thus, Sugisawa teaches partial vacuum in the package where if the total volume of the package is 100, the air volume would be 15. Therefore, the preferable fish volume taught by Sugisawa would be 85 and the resulting ratio of air to fish is about 18% by volume, which would fall in the range recited by the applicant in claims 6-9 and 14-17.

It has been known in the art of packaging food especially meat or fish products to reduce the amount of air from the package before sealing to increase the shelf life of the

Art Unit: 1761

food. It has also been also known that reducing the air volume in the package to about 15% or less or air to meat ratio of about 18% by volume or less, enhances the effect of sterilization or preserves the cooked fish product better (Sugisawa, Column 3, lines 3-34). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Ueyama and include about 18% volume of air to the packaged shellfish (crabmeat) product, to enhance the effect of the heat treatment (pasteurization or sterilization) and also to prevent deterioration of crabmeat due to breaking. One of ordinary skill in the art would have been motivated to package with air to food ratio of about 18% to have a packaged fish or shellfish product with less bacteriological and physical damage during processing and storage, which is also the intent of the applicant.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

(US 3852486) Walker et al., teach a process of preserving shellfish and meat by packaging in pouch or bag and pasteurizing.

(US 2546428) Byrd teaches method of keeping shellfish and crustacean meat fresh by reducing the amount of undesirable air space in the package.

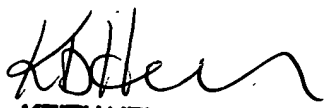
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Chawla whose telephone number is (571) 272-8212. The examiner can normally be reached on 8:00 am to 4:30 pm.

Art Unit: 1761

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jyoti Chawla
Examiner
Art Unit 1761


KEITH HENDRICKS
PRIMARY EXAMINER